

Remarks

I. Amendment

Claims 1, 10, and 19 are herein amended. Claims 1–19 are to remain pending following entry of this amendment. No new matter has been added.

II. 35 U.S.C. § 101

In the Office Action mailed March 20, 2006, the Examiner rejected claims 1–9 and 19 under 35 U.S.C. § 101 as directed to unpatentable subject matter. The applicants have amended claims 1 and 19 and consequently request that this rejection be withdrawn. This amendment is made without admission and without prejudice, and the applicants reserve the right to assert the original subject matter again in this or another patent application.

III. 35 U.S.C. § 102(b)

The Examiner rejected claims 1 through 18 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 6,094,651 to Agrawal et al. (“Agrawal”). The rejection is traversed, and reconsideration is respectfully requested in light of the following.

The present application relates to methods and software for recognizing items that satisfy rigid general rules for organizing information, but differ from other items that also satisfy the rules, thereby requiring a user or supervising software process to be notified. (*See* Application at p. 1, lines 11–14.) Statistics are calculated for data items within a collection. (*See id.* at p. 3, lines 10–12.) An “anomalous data item,” for the purposes of this application, is one that falls within the scope defined by a rule, but differs from other data items that fall within the scope defined by the rule such that it is advantageous to bring the anomaly to the attention of the user or supervising software process. (*See id.* at 3, lines 13–16.)

In contrast, Agrawal discusses improvements to multi-dimension data processing using a multidimensional database (“MDDB”) or “data cube” model. (Col. 1, lines 21-36.) Data elements in a data cube are analyzed, and an expected value is calculated for each data element using trends that are common to data elements within a given row, a given column and all data elements within the cube. (Col. 7, lines 37-46.) The actual value of the data element is thereafter compared with the expected value of the data element to calculate a “surprise value”. (Col. 7, lines 49-53.) An “anomaly,” as discussed in Agrawal, is a data element with a surprise value exceeding a predetermined threshold, and these anomalies are highlighted. (Col. 2, lines 40-44 and Col. 4, lines 47-52.) Agrawal discusses finding unexpected data values and does not involve identifying potential misclassification of data items through the rigid application of rules.

Thus, with respect to independent claims 1 and 10, Agrawal fails to disclose all the claimed elements. Specifically, Agrawal does not disclose or suggest applying one or more second rules to calculated statistics to determine whether a data item is an anomalous data item that may not belong to a collection despite satisfying at least one rule used to put data items into that collection, as set forth in claims 1 and 10. One example discussed in Agrawal is the use of such anomalies to show that “sales of ‘Diet-Soda’ in Region ‘E’ (Eastern) decreased by an exceptionally high value of 40% and 33% for the months of August and October, respectively.” (Agrawal, col. 5, lines 48–51.) But there is no suggestion in Agrawal of determining that, for example, the sales decrease was mistakenly attributed to Region “E”, or that it actually took place in the month of March.

Further, just as Agrawal does not disclose or suggest identifying anomalies related to classification rules, it does not disclose or suggest indicating to at least one user that the collection contains at least one data item that has been identified as anomalous with regard to other data items in the collection, also as set forth in claims 1 and 10.

Consequently, Agrawal fails to teach or otherwise suggest all elements of independent claims 1 and 10. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 1 and 10 and allowance of the same.

IV. 35 U.S.C. § 103(a)

The Examiner rejected independent claim 19 under 35 U.S.C. § 103(a) as unpatentable over Agrawal in view of U.S. Patent No. 6,567,796 to Yost et al. (“Yost”). This rejection is traversed, and reconsideration is respectfully requested in light of the following.

As with independent claims 1 and 10, claim 19 includes applying one or more second rules to calculated statistics to determine whether a data item is an anomalous data item that may not belong to a collection despite satisfying at least one rule used to put data items into that collection. As discussed in connection with claims 1 and 10, Agrawal neither discloses nor suggests such calculation, and the Examiner does not suggest that Yost supplies this limitation. It is therefore respectfully submitted that claim 19 is also allowable over the cited references.

Additionally, the applicants respectfully submit that Agrawal may not be cited under 35. U.S.C. § 103(a) as prior art to this application. The present application and Agrawal were, at the time the invention of the present application was made, owned

by IBM. Therefore, Applicants assert common ownership in accordance with MPEP 706.02(1)(2), disqualifying Agrawal as prior art under 35 U.S.C. § 103(c). Reconsideration and withdrawal of the rejection of claim 19 under 35 U.S.C. § 103(c) is therefore respectfully requested.

V. Conclusion

The dependent claims of the present application contain additional features that further substantially distinguish the invention of the present application over the art of record. Given the Applicant's position on the patentability of the independent claims, however, it is not deemed necessary at this point to delineate such distinctions.

For the above reasons, the Applicant submits that the present invention, as claimed, is patentable over the references cited by the Examiner. Accordingly, reconsideration and allowance of pending claims 1 through 19 is therefore respectfully solicited. To expedite prosecution, the Examiner is invited to contact the Applicant's representative at the number below.

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Respectfully submitted,

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